

**INTEGRATED PEST  
MANAGEMENT**

**Grades 2 & 3 Curriculum**



**Animal Babies and Adults  
Insect Babies and Adults  
Picture Card Sets**

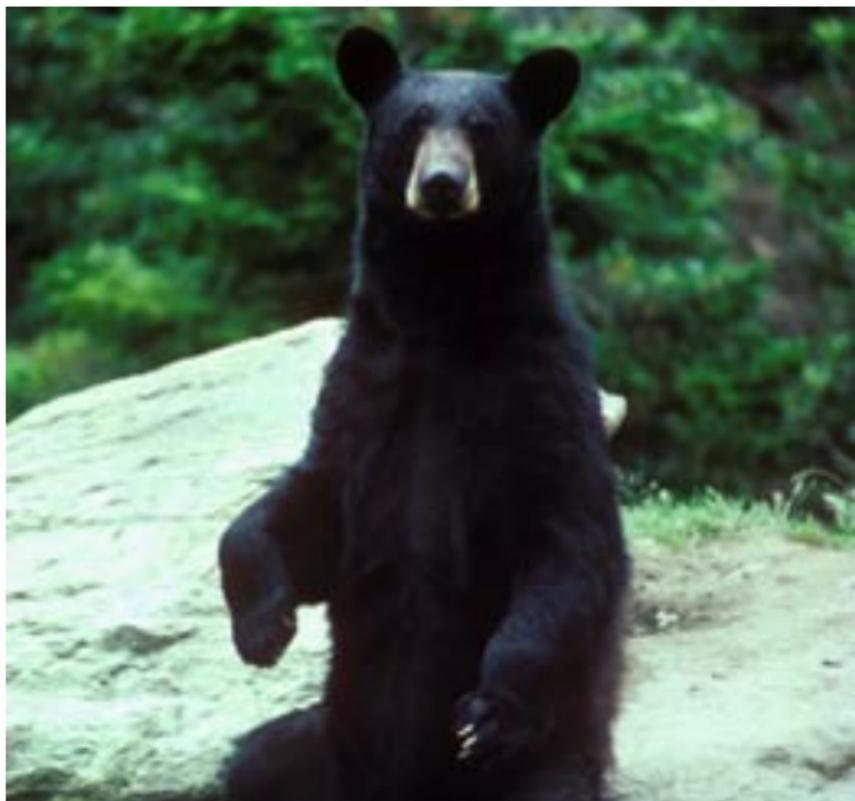


Photo By Mike Bender, images.fws.gov

## Black Bear

A mother bear is a **sow**; the father is a **boar**. The young, called **cubs**, stay with the mom about 17 months prior to setting off on their own.



University of Connecticut Integrated Pest Management



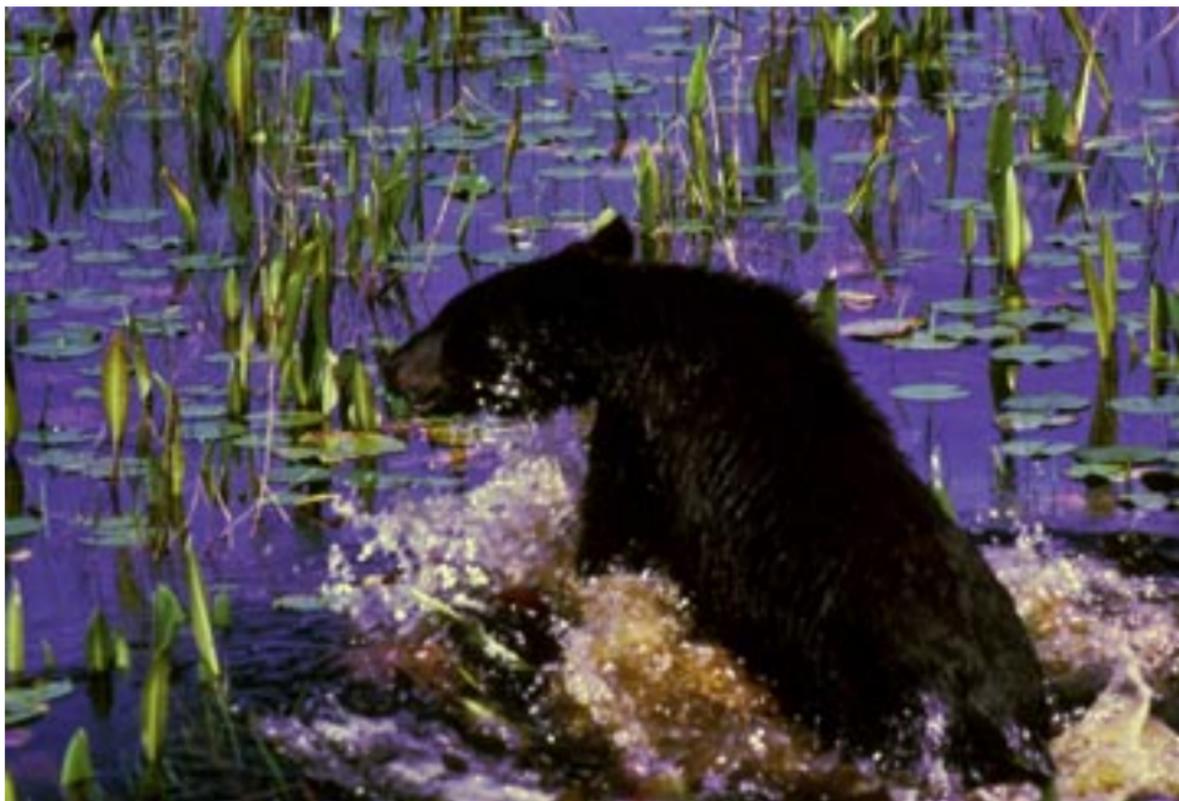


Photo By R.I. Bridges, images.fws.gov

## Black Bear Cub

A mother bear is a **sow**; the father is a **boar**. The young, called **cubs**, stay with the mom about 17 months prior to setting off on their own.



University of Connecticut Integrated Pest Management





Photo By U.S. Fish and Wildlife Service, [images.fws.gov](https://images.fws.gov)

## Sea Otter

A baby otter is called a **pup**. A group of otters makes up a raft!



University of Connecticut Integrated Pest Management





Photo By Richard Bucich

## Sea Otter Pup

A baby otter is called a **pup**. A group of otters makes up a raft!



University of Connecticut Integrated Pest Management



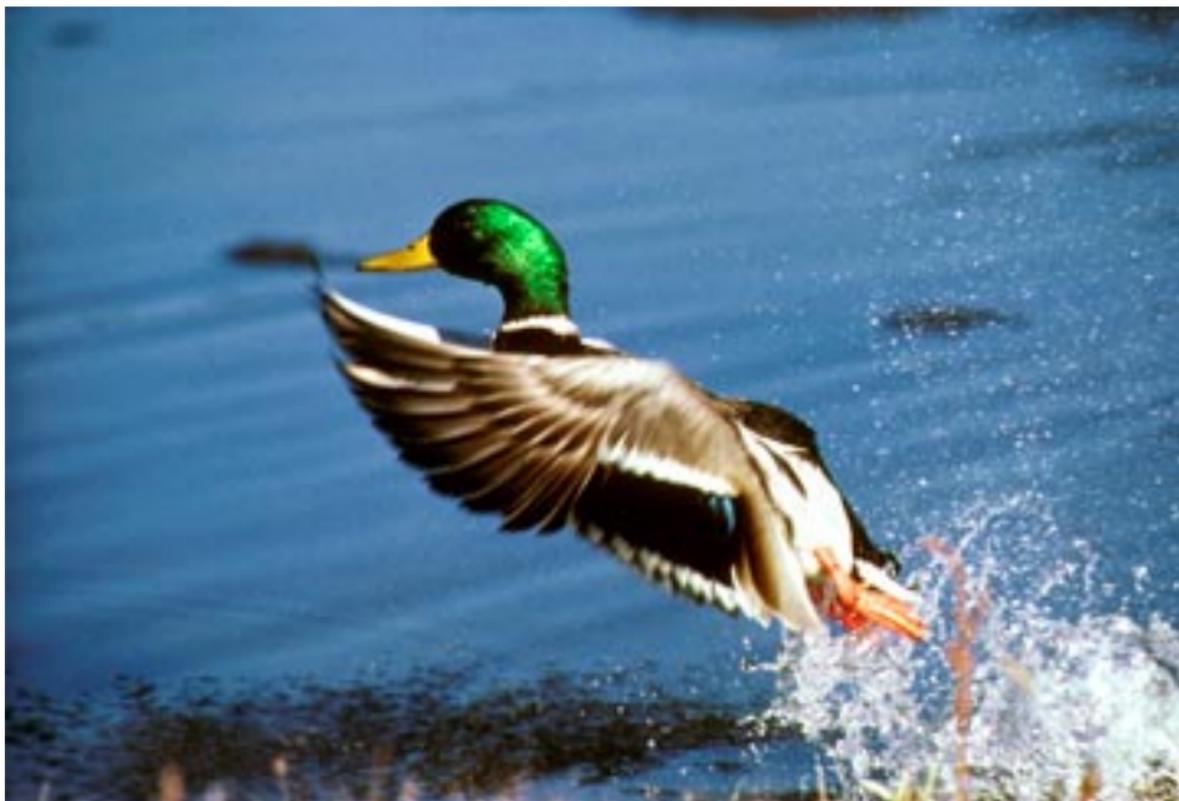


Photo By Bauer, Erwin and Peggy, images.fws.gov

## Duck

Baby **ducklings** call daddy **drake** and mom **duck**! They hatch from eggs and learn to survive by following mom's example.



University of Connecticut Integrated Pest Management





Photo By Larry Smith, images.fws.gov

## Duckling

Baby **ducklings** call daddy **drake** and mom **duck**! They hatch from eggs and learn to survive by following mom's example.





Photo By Dave Menke, images.fws.gov

## Bald Eagle

Mom is bigger than dad, and both share the responsibilities of parenthood. The nursery nest is 7 to 8 feet across and usually contains 1 to 3 eggs called a clutch. The **fledging eaglets** stay in the nest until they are ready to fly.



University of Connecticut Integrated Pest Management





Photo By Donna Dewhurst, images.fws.gov

## Fledging Eaglet

Mom is bigger than dad, and both share the responsibilities of parenthood. The nursery nest is 7 to 8 feet across and usually contains 1 to 3 eggs called a clutch. The **fledging eaglets** stay in the nest until they are ready to fly.



University of Connecticut Integrated Pest Management





Photo By Jesse Achtenberg, images.fws.gov

## Bison

They may not look like dairy cows, but bison belong to the same group called bovines. Therefore, dads are **bulls**, moms are **cows** and the little ones are **calves**.





Photo By Ralph Town, [images.fws.gov](https://images.fws.gov)

## Bison Calf

They may not look like dairy cows, but bison belong to the same group called bovinés. Therefore, dads are **bulls**, moms are **cows** and the little ones are **calves**.



University of Connecticut Integrated Pest Management





Photo By R. Tuck, images.fws.gov

## Bullfrog

**Bullfrogs** are dads and have a much deeper voice than mom. The offspring of frogs start off as eggs, become legless **pollywogs** and then **tadpoles** which develop legs, but still must live in water. When they lose their tails and can breathe on land they are called frogs.



University of Connecticut Integrated Pest Management



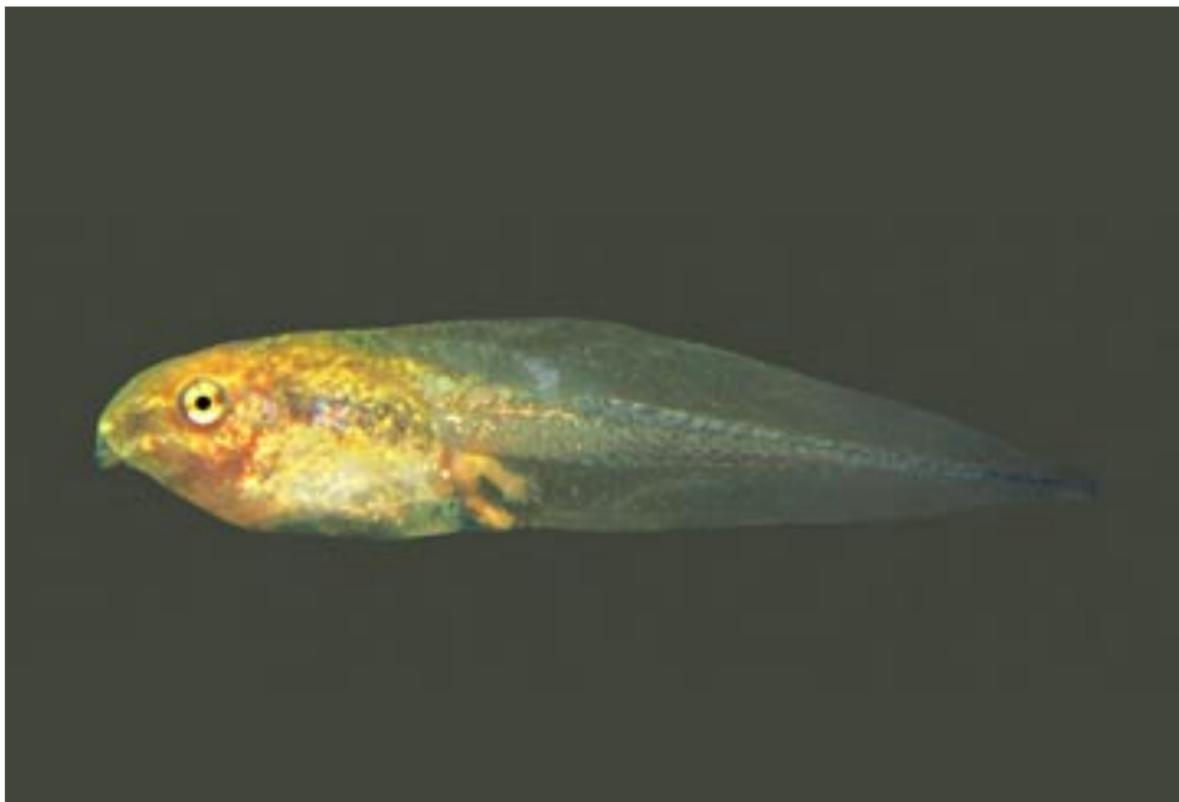


Photo By Ron Altig, fwie.fw.vt.edu

## Pollywog/Tadpole

**Bullfrogs** are dads and have a much deeper voice than mom. The offspring of frogs start off as eggs, become legless **pollywogs** and then **tadpoles** which develop legs, but still must live in water. When they lose their tails and can breathe on land they are called frogs.



University of Connecticut Integrated Pest Management





Photo By Luther C. Goldman, images.fws.gov

## Snake

Mama snake lays eggs from which baby snakes, who look like tiny versions of her, emerge.



University of Connecticut Integrated Pest Management





Photo By LaVonda Walton, images.fws.gov

## Snake Baby

Mama snake lays eggs from which baby snakes, who look like tiny versions of her, emerge.



University of Connecticut Integrated Pest Management





Photo By William W. Hartley, images.fws.gov

## Salmon

Each spring, Atlantic salmon hatch from pea sized orange eggs laid the previous autumn in fresh water rivers. The newly hatched **alevin** stay hidden in their nest buried in the riverbed until they develop enough to wiggle up through the sand and gravel to feed on microscopic aquatic life. At this point the **fry**, infant salmon, look more like minnows than their parents. It will take them 2 to 6 more years and 2 more growth stages to fully develop.



University of Connecticut Integrated Pest Management





Photo By Roger Peters, images.fws.gov

## Salmon Baby

Each spring, Atlantic salmon hatch from pea sized orange eggs laid the previous autumn in fresh water rivers. The newly hatched **alevin** stay hidden in their nest buried in the riverbed until they develop enough to wiggle up through the sand and gravel to feed on microscopic aquatic life. At this point the **fry**, infant salmon, look more like minnows than their parents. It will take them 2 to 6 more years and 2 more growth stages to fully develop.



University of Connecticut Integrated Pest Management





Photo By U.S. Fish and Wildlife Service, images.fws.gov

## Swan

Dad, a **cobb**, and mom, a **pen**, stay together throughout their lives. Their offspring, **cygnets**, are beautiful only in their eyes, but they do grow into the graceful long necked birds that glide around our tidal waters.



University of Connecticut Integrated Pest Management





Photo By WKB, images.fws.gov

## Swan Cygnet

Dad, a **cobb**, and mom, a **pen**, stay together throughout their lives. Their offspring, **cygnets**, are beautiful only in their eyes, but they do grow into the graceful long necked birds that glide around our tidal waters.



University of Connecticut Integrated Pest Management





Photo By University of Illinois/James Appleby, images.fws.gov

## Beetle

Like all true insects, beetles go through 4 stages of metamorphosis; **egg**, **larva**, **pupa** and **adult**. The animal that emerges from the egg does not resemble its parents and must go through distinct changes in growth and structure prior to assuming its adult form.





Photo By Dave Powell, USDA Forest Service, [www.forestryimages.org](http://www.forestryimages.org)

## Beetle Larva

Like all true insects, beetles go through 4 stages of metamorphosis; **egg**, **larva**, **pupa** and **adult**. The animal that emerges from the egg does not resemble its parents and must go through distinct changes in growth and structure prior to assuming its adult form.



University of Connecticut Integrated Pest Management





Photo By Glen Smart, images.fws.gov

## Butterfly

Mom and dad look nothing like their newly hatched offspring! This is because butterflies go through 4 distinct phases in their life time. When they hatch from **eggs**, they are **larva**. We recognize them as caterpillars. When they go into their resting phase, they are called **pupa**. During this phase changes both inside and out result in **adult** butterflies.



University of Connecticut Integrated Pest Management





Photo By S. Ron Singer, images.fws.gov

## Butterfly Caterpillar

Mom and dad look nothing like their newly hatched offspring! This is because butterflies go through 4 distinct phases in their life time. When they hatch from **eggs**, they are **larva**. We recognize them as caterpillars. When they go into their resting phase, they are called **pupa**. During this phase changes both inside and out result in **adult** butterflies.



University of Connecticut Integrated Pest Management





Photo By Joseph Berger, [www.forestryimages.org](http://www.forestryimages.org)

## House Fly

Believe it or not those hairy flying insects you find annoying are the parents of those white wormy things you may have seen in the bottom of a garbage pail or on the body of a dead animal! Flies go through 4 stages of metamorphosis. Adult females lay **eggs** on decaying plant and animal matter where they hatch into the **larvae** called maggots. They go into a resting phase called **pupae** and emerge as **adult** flies with 2 wings rather than the 4 common to most insects. The entire cycle takes 7 to 10 days.



University of Connecticut Integrated Pest Management





Photo By Lance S. Risley, William Paterson University, [www.forestryimages.org](http://www.forestryimages.org)

## House Fly Maggot

Believe it or not those hairy flying insects you find annoying are the parents of those white wormy things you may have seen in the bottom of a garbage pail or on the body of a dead animal! Flies go through 4 stages of metamorphosis. Adult females lay **eggs** on decaying plant and animal matter where they hatch into the **larvae** called maggots. They go into a resting phase called **pupae** and emerge as **adult** flies with 2 wings rather than the 4 common to most insects. The entire cycle takes 7 to 10 days.



University of Connecticut Integrated Pest Management





Photo By Scott Bauer, USDA ARS, [www.forestryimages.org](http://www.forestryimages.org)

## Honeybee

Bees are social insects that live together in hives. Each bee has a job which helps the hive survive. Only one female bee, the **queen**, lays all the eggs! All the other females are **worker bees**. Depending on their age, they either gather food, clean the hive, care for the immature bees, build new nursery cells, protect the hive or keep it cool! Male bees are **drones**. Their sole purpose is to mate with the queen.



University of Connecticut Integrated Pest Management





Photo By Carl Dennis, Auburn University, [www.forestryimages.org](http://www.forestryimages.org)

## Honeybee Larva

Bees are social insects that live together in hives. Each bee has a job which helps the hive survive. Only one female bee, the **queen**, lays all the eggs! All the other females are **worker bees**. Depending on their age, they either gather food, clean the hive, care for the immature bees, build new nursery cells, protect the hive or keep it cool! Male bees are **drones**. Their sole purpose is to mate with the queen.



University of Connecticut Integrated Pest Management





Photo By Susan Ellis, [www.forestryimages.org](http://www.forestryimages.org)

## Mosquito

Dads are vegetarian, but mom needs the protein in blood to produce her eggs. She lays an **egg** mass of 50 to 400 on the surface of still puddles and ponds where they hatch into larvae in 1 or 2 days. As they feed on microscopic organisms in the water over the next 7 to 10 days, these wingless **larvae** grow and molt several times. They then go into the **pupa** phase during which time they float on the surface of the water but do not feed. At the end of a few days an **adult** mosquito emerges, and after taking a few minutes to let its wings dry, takes off to find a mate.



University of Connecticut Integrated Pest Management





Photo By Jim Occi, BugPics, [www.forestryimages.org](http://www.forestryimages.org)

## Mosquito Larva

Dads are vegetarian, but mom needs the protein in blood to produce her eggs. She lays an **egg** mass of 50 to 400 on the surface of still puddles and ponds where they hatch into larvae in 1 or 2 days. As they feed on microscopic organisms in the water over the next 7 to 10 days, these wingless **larvae** grow and molt several times. They then go into the **pupa** phase during which time they float on the surface of the water but do not feed. At the end of a few days an **adult** mosquito emerges, and after taking a few minutes to let its wings dry, takes off to find a mate.



University of Connecticut Integrated Pest Management





Photo By Whitney Cranshaw, Colorado State University, [www.forestryimages.org](http://www.forestryimages.org)

## Grasshopper

Grasshopper babies, unlike most insects, look like mom and dad in miniature as soon as they emerge from their eggs. They have only three stages: **egg**, **nymph** and **adult**. Nymphs molt (shed their exoskeletons) five times over 30 to 40 days to reach adult size.



University of Connecticut Integrated Pest Management





Photo By Whitney Cranshaw, Colorado State University, [www.forestryimages.org](http://www.forestryimages.org)

## Grasshopper Nymph

Grasshopper babies, unlike most insects, look like mom and dad in miniature as soon as they emerge from their eggs. They have only three stages: **egg**, **nymph** and **adult**. Nymphs molt (shed their exoskeletons) five times over 30 to 40 days to reach adult size.



University of Connecticut Integrated Pest Management



# Contents

## Animal Baby Picture Card Set

Black Bear  
Sea Otter  
Duck  
Bald Eagle  
Bison  
Bullfrog  
Snake  
Salmon  
Swan

## Insect Baby Picture Card Set

Beetle  
Butterfly  
House Fly  
Honeybee  
Mosquito  
Grasshopper

